MONTANA WETLAND COUNCIL MEETING

Thursday November 15th, 2012
DEQ Directors Conference Room
1520 East 6th Avenue, Helena MT

8:45 am. Gather for CCC (Coffee and Conversation with Colleagues).

9:00 am. Welcome, Round-Robin Introductions, and Participant Updates.
Lynda Saul, DEQ Wetland Program Coordinator/Wetland Council Chair.
Participant updates and Strategic Framework Working Group Reports.

Meeting Focus – Targeted wetland restoration for water quality improvement, habitat, flood storage, and overall watershed management.

10:00 am. Montana's Reference Wetland Network: A Tool for Wetland Restoration
Karen Newlon, Ecologist/Project Manager, Montana Natural Heritage Program
The Montana Natural Heritage Program has developed a reference wetland network consisting of wetland sites that represent multiple wetland systems along a gradient of condition. This reference network helps define characteristic levels of integrity while also establishing the range and variability of multiple wetland attributes. These wetlands can provide a framework for comparing observed differences in integrity between restored wetlands and natural wetlands. The ecological integrity of restored wetlands can be improved if information from reference network wetlands is used to both design restoration projects and to evaluate their success. The use of these data to guide the design of restoration projects helps to ensure that the appropriate ecological integrity endpoints are selected and allow for restoration practitioners to adaptively manage the restoration process.

10:30 am. Break

10:45 am. A Montana Specific Web-based Tool for Addressing Water Quality Impairments through Wetland Restoration and Protection
Steve Carpenedo, Montana DEQ, Wetlands Environmental Science Specialist
A new interactive web application allows users to explore where protecting and restoring wetlands can help address water quality and water quantity impairments identified in the TMDL planning process. This tool provides information on which wetlands types have the best ability to address water quality impairments for a contributing area and which specific wetland functions should be targeted to address those impairments. It also provides wetland location so that field-based investigations for restoration and/or protection needs could be conducted. While this project concentrated on two pilot watersheds, the interactive web application was designed to provide similar information for any watershed in Montana. This talk will describe the interactive web tool.

11:00 am. Applying the Web-based Tool: Big Hole Watershed Committee and Greater Gallatin Watershed Committee Approach and Experiences
Jen Titus, Executive Director Big Hole Watershed Committee
Tammy Crone, Water Quality Specialist, Gallatin Local Water Quality District
Tom Hinz, Montana Wetlands Legacy Partnership
MDEQs Wetland Program, Montana Wetlands Legacy Partnership, Big Hole Watershed Committee, and Greater Gallatin Watershed Council will talk about their work using wetland restoration and protection to address water quality impairments. This was a two-year pilot project focusing on site identification and planning. The goals of this project were: 1) increase the capacity of local governments and watershed groups to develop comprehensive watershed restoration plans; 2) demonstrate the steps, techniques, and tools necessary for incorporating wetlands into watershed planning; and 3) demonstrate how the incorporation of wetlands into watershed restoration plans can contribute to reducing pollutant loads.

Noon Lunch Break (on your own, or bring a bag lunch and network w/ colleagues in the meeting room)

1:00 pm. Shiloh Conservation Area--Wetland Development for Water Quality, Flood Water Detention and Recreation/Aesthetics
Wade Irion, P. E., Regional Manager, Dowl-HKM and
Tom Parker, Principal Ecologist, Geum Environmental Consulting, Inc.

The City of Billings acquired a 70 acre parcel for development of the Shiloh Conservation Area (SCA) where agricultural lands are being converted to residential and commercial uses. Anticipating the effects of urban growth, the SCA will balance the objectives of water quality improvement, flood control and recreational benefits to the community. A series of wetlands and open water features will function to trap sediment; remove nutrients from the water column; provide secondary flood detention; and be distributed within a public park. A preliminary design was completed in August by Dowl-HKM, Inc. with support from Land Design Inc. and Geum Environmental Consulting. Over the next two years, the project design will be completed and constructed, and then monitored to evaluate its effectiveness for water quality improvement and flood control. Lessons learned from this project will apply to future projects as the City plans and extends its infrastructure to anticipate growth from development.

1:30 pm. Mission Creek Water Quality Improvement

Rusty Sydnor, Botanist, Confederated Salish and Kootenai Tribes Fisheries Program

Numerous monitoring projects have identified Mission Creek on the Flathead Indian Reservation as one of the largest sources of sediment and nutrients to the Clark Fork River system. Two irrigation waste-water canals that flow into Mission Creek are largely responsible for reductions in water quality within the drainage. Both waterways enter Mission Creek across a single property which the Confederated Salish and Kootenai Tribes purchased in 2005 to address the problem. From 2008 to 2012, the Tribes constructed about 19 acres of remedial wetlands on the property. Irrigation waste water is diverted first into settling ponds to remove sediment and then into a series of shallow wetlands to remove nutrients. Preliminary comparisons between inflow and outflow from the wetland system indicate substantial reductions in total water volume, turbidity and nutrients.

2:00 pm. Break

2:20 pm. Targeting Conservation Practices in Agricultural Watersheds

Eloise Kendy, Senior Freshwater Scientist, North America Region, The Nature Conservancy

Historically, NRCS has awarded contracts for agricultural conservation practices under the Farm Bill more-or-less on an opportunistic basis. The Mississippi River Basin Initiative (MRBI) is demonstrating a more systematic approach of targeting suites of practices to reduce nutrient loads from selected agricultural watersheds. To achieve watershed-scale results, conservation practices must be applied not only on farm fields, but also in the wetlands and waterways that process and convey pollutants. Two MRBI watersheds – Boone River in northern Iowa and Root River in southeastern Minnesota – show how model-driven targeting is playing out on the ground and the integral role of constructed and restored wetlands.
http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS//nrcs143_008142.pdf

2:35 pm. Re-plumbing More Than A Century of Stream Manipulation to Address Contaminated Groundwater

Jim Ford, Hydrogeologist/Project Manager, Montana Environmental Trust Group (METG)

METG assumed responsibility for cleanup of the former Asarco Lead Smelter in East Helena, which is being implemented under EPA's Resource Conservation and Recovery Act (RCRA). The cleanup is focused primarily on arsenic and selenium contaminated groundwater. One of the cleanup plans is intended to: (1) eliminate surface water recharging site groundwater; (2) reduce the amount of groundwater in direct contact with highly contaminated soils; and (3) decrease the rate and concentration of contaminated groundwater leaving the site. The cleanup plan involves construction of a temporary bypass channel on Prickly Pear Creek to allow removal of engineered structures, realignment of over a mile of creek, and conversion of two man-made water supply and disposal lakes to vegetated, woody wetlands. These new higher value wetlands and the enhanced riparian zone are expected to create additional habitat and provide public access for trails, fishing and other recreational uses.

3:10 pm. Discussion.

Participants invited to discuss meeting topic, identify Council follow up and next steps.

4:00 pm. Adjourn

Next Council Meeting: January 30. Assessment and 5-year update of Wetland Strategic Plan

The Montana Wetland Council meets three times a year and is an active network of diverse interests that works cooperatively to conserve and restore Montana's wetland and riparian ecosystems by implementing Montana's Wetland Plan. Everyone is welcome to attend. For additional information contact Lynda Saul, Montana DEQ, (406) 444-6652 or lsaul@mt.gov. Website: Montana Wetland Clearinghouse